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Original Articles.

PUS-CORPUSCLES, LEUCOCYTES, LEUKÆMIA AND PYÆMIA.

BY ROLLIN R. GREGG, M. D.

(*Continued from page 102.*)

Having, as I trust, satisfactorily disposed of the question of the origin of pus-corpuscles in my last, we will now take up the subject of leucocytes and leukæmia. Here, again, if I mistake not, we have to deal with *decolorized* blood-corpuscles, and with those only; but after the color has been taken from them by a very different process from that of suppuration. Before we can understand this part of our subject clearly, however, we must know something of the creation or manufacture, and also something of the natural dissolution of the red blood-corpuscles, after their death from old age or other causes, both of which points we will now proceed to consider in their proper order.

WHERE THE BLOOD-CORPUSCLES ARE MADE.

First, then, in regard to the origin of the red corpuscles of the blood. From all the facts given by the best authorities, there can be little doubt that these corpuscles are manufactured in and by the lacteal or mesenteric glands, from the albumen and fatty matters

taken up by the lacteal vessels from the chyle as it passes along through the small intestines. The albumen and fatty matters thus taken up are first moulded, or organized, into minute granules, by the first or simplest set of mesenteric glands, which granules are then gathered into clusters and a cell-wall secreted or in some way thrown around them by more complex glands, when all such clusters of granules (each cluster being inclosed in its own cell-wall) become the chyle corpuscles, or in other words, incipient blood-corpuscles. All this is accomplished, and these corpuscles are more and more perfected, as they pass on through successive glands and chyle vessels into and through the receptaculum chyli, thoracic duct, left subclavian vein, and then into the general circulation.

Now, it must be further understood that these chyle corpuscles, which, I repeat, are incipient red blood-corpuscles, are *colorless* in their beginning, and are then precisely like leucocytes, or white blood-corpuscles. But they receive some color as they pass from the last set of mesenteric glands through the lacteal vessels to the receptaculum, and more still in passing through that and the thoracic duct, until they are finally perfected in their coloring and other attributes in the blood itself. And, furthermore, they are not flattened upon opposite sides to become disk-shaped, like fully developed blood-corpuscles, until they receive more or less of their color. In other words, the red corpuscles of the blood commence their lives as globular and colorless bodies, like leucocytes, but are very early changed in form and colored, to subserve the purposes of their creation, live a definite period, then die of old age, and return to their original form and want of color, before their final dissolution, as we have seen is the fact with them when changed to pus-corpuscles, and as we shall see is equally a fact with them when changed to leucocytes.

RAPIDITY OF MANUFACTURE OF BLOOD-CORPUSCLES.

According to the most careful estimates that can be made, and allowing six weeks as the average duration of the life of the red blood-corpuscles, there are more than *five hundred millions* of them made *every minute* by every healthy adult human being. The more accu-

rate figures show that in every healthy person of full habit, or possessing twenty pounds of blood, there are seven hundred and twenty-four millions of these red blood-corpuscles made a minute during adult healthy life.

Nor is this the extravagant estimate that it may seem at first sight; for there are 75,950,000,000 of blood-corpuscles in a single cubic inch of blood, consequently the manufacture of 724,000,000 of them per minute would show less than a hundreth of a cubic inch of them made a minute, or only a cubic inch of them made in a little less than two hours, which would undoubtedly be much too low an estimate, especially for several hours after full meals.

From the fact that these corpuscles are made so rapidly and in such enormous numbers, it is self-evident the manufacturing organs must be in direct and immediate connection with an unfailing source of supply of the materials out of which they are made, as with the chyle in the small intestines, through the medium of the great numbers of lacteals commencing upon the inner wall of the intestines; and not with any precarious or doubtful source of supply, as would be the case if the lymphatic vessels and glands of the general system were the seat of manufacture, as some claim, and where the supply of material would be always scanty and uncertain.

AS MANY CORPUSCLES MUST DIE AND BE DISINTEGRATED PER MINUTE AS ARE MADE.

Well, if that number, or whatever number, of red blood-corpuscles are made every minute, in health, with but a few weeks assigned as the natural life of each, we can all see that just as many of them must die of old age, be dissolved, and excreted as worn-out or refuse matter, every minute, or cloggings and congestions would occur everywhere that would soon, and as inevitably take life, as that such a state of things were allowed to go on. Indeed, an almost mathematical exactness must be maintained between the making and the death from old age and dissolution of the blood-corpuscles, or no one could maintain perfect health for a day. Too many of them in the circulation would lead at once to congestions, or to great risk of congestions; and there can be little doubt that most congestive dis-

eases are more or less due to these corpuscles not being destroyed in the regular order of nature, or in disease, as fast as they ought. Too few of them lead to anæmia or anæmic conditions with debility and other corresponding legitimate consequences.

RED BLOOD-CORPUSCLES DECOLORIZED IN HEALTH.

The next point in order, to aid us in a clearer understanding of our subject is this: When, in health, the blood-corpuscles reach old age, die a natural death, and *must* be disintegrated and cast off as refuse, like all other worn out matter, to avoid disease from that source, they are first decolorized and brought back to present the identical appearance they did at first, or when they started out as chyle-corpuscles, without color. Then, in the further process of their destruction after death, the cell-wall is dissolved away from them, or distended to bursting, thus liberating the inclosed granules, of which they are almost wholly composed, which granules are then in turn dissolved, and lastly excreted as refuse matter. That is to say, the red blood-corpuscles are decolorized and disintegrated literally in the inverse order of their construction. The coloring being the last thing given them when created, it is the first thing taken from them after their death. The cell-wall being the next most conspicuous feature in their construction, preceding their coloring, it is the next to yield in their destruction, after decolorization, to liberate the inclosed granules, which are then dissolved in the inverse order of their being made, and excreted through the bowels as a part of the natural fœcal matter.

WHERE THE RED CORPUSCLES ARE DISINTEGRATED IN HEALTH.

Where the old and worn out blood-corpuscles of health are disintegrated after their death, has been a matter of much investigation, and of no little controversy. There is much evidence, however, going to show that both the liver and spleen take part in this work, and quite probably also the whole system of lymphatic glands excepting the mesenteric, and possibly the kidneys. The fact that many more red blood-corpuscles enter, than leave, the spleen and liver would seem to show conclusively that these organs do not make, but unmake, red corpuscles.

The corpuscles are made by glands, the mesenteric, and it is no doubt a fact in nature that other glandular structures, the liver, spleen, etc., are required for their disintegration. And here I recur again to that point of such great importance, namely: the absolute necessity that must exist for the corpuscles being destroyed quickly and as fast as they arrive at old age or the end of their usefulness, to avoid congestions and dangers to life in that way arising at any time in health; which necessity must have required the most ample provision being made for such disintegration of them at the proper time, and by more than one organ, so that if one were diseased to greatly interfere with this needed work, another could take it up and carry it on for a time, and thus in many instances permit of the patient being restored to health; whereas, in every such case death would be inevitable were such ample provision not made, that is, if there were but one organ to disintegrate them, and that seriously diseased.

Another point of interest and instruction presents itself here, which is this, namely; that the greatly increased numbers of white, or colorless blood-corpuscles, found in the hepatic and splenic veins, beyond what the portal vein and the hepatic and splenic arteries contain, are no doubt so many blood-corpuscles, dead of old age, and decolorized, (not made), by these organs, preparatory to their entire disintegration, for casting out of the circulation, as then useless matter. And when physiologists come to recognize this fact, and explain the appearance of their so-called leucocytes, in those veins, upon this basis, they will make much greater advances in knowledge upon this whole subject of colorless corpuscles, than has been made by them of late. It is the appearance of these *dead* and now colorless corpuscles in the hepatic and splenic veins, and decolorized by the liver and spleen, that has, no doubt, misled so many to think it was those organs that made white blood-corpuscles, which were subsequently changed into the red.

All the facts above given, bearing upon the making and the destruction of blood-corpuscles as they arrive at old age, it must be borne in mind, apply to those processes in *health*. Now we will pass on to the conditions in disease wherein colorless blood-corpuscles, or leu-

cocytes, appear in increased numbers in the general circulation. But before we can properly understand this, another set of facts, not yet touched upon, must be called up and explained as follows: The blood-corpuscles are made to live in a watery medium, the serum, of a certain fixed, or nearly fixed, density in health. If there is much deviation either way in the density of the serum, it being too dense, or not as dense as natural, the corpuscles always suffer, and unavoidably so. There is a law of nature, the law of endosmosis, that governs the action of the corpuscles under such circumstances, just as absolutely as the law of gravity governs the action of falling bodies; and there is no possible escape from the mandates of the law in the one case, more than the other. If the serum is too dense, as sometimes, but rarely happens, in disease, a portion of the water of the corpuscles that is so necessary to the proper performance of their natural functions, is taken from them by osmosis, and they suffer, and the whole system suffers accordingly. If the serum becomes less dense than natural, that is, too watery, which is one of the most common results in various diseases, in fact, almost universal in nearly all diseases, then the corpuscles suffer in that way; and this brings us to the most important part of this branch of our subject, as will be seen by the following:

DECOLORIZATION OF RED CORPUSCLES IN AND BY DILUTED SERUM.

In *every* case of disease, no matter what its cause or nature, in which the serum becomes, or by which it is made too watery, a greater or less number of the red blood-corpuscles, just in proportion to the dilution of the serum, are prematurely decolorized in the blood, and just that unnatural number of white blood-corpuscles, or leucocytes, appear in the general circulation.

That is to say, the water of this too watery serum penetrates the cell-walls of the corpuscles, distends them from disks to globules, and dissolves the hæmatin out of them, when they come back to the condition and appearance they presented at the time they started out in life as chyle-corpuscles. But they are now *dead* bodies, though not from age, but from disease, and no longer of use, undergoing retrograde metamorphosis, the first steps in which are distention to

the globular form and decolorization, then comes the bursting of the cell-wall and liberation of the inclosed granules, (the same as we have seen was the case with them after their natural death,) in order that they, being dead, may be cast out of the circulation before they become putrid to taint and poison the very fountains of life itself, or lead to other consequences about as serious.

But there is this difference between the dissolution of the corpuscles dying of old age, and those killed by a too watery serum. The former is natural and done by the spleen and liver, and ample provision was made for their disintegration and excretion without disease, or even the least disturbance of the functions of life. The latter is unnatural, the corpuscles being decolorized in the general circulation, where not designed, and more rapidly than in health. Hence, in the latter case, there is much more of their refuse to be excreted in a given time, provision for which was, of course, not made ; and hence the congestions and diseases that so often result under such circumstances, to those organs, the liver and spleen, whose office it is to disintegrate and prepare said corpuscles, or their debris, for a final casting out of the system, as we shall see.

It being a law of nature that thus compels the decolorization and destruction of the colored corpuscles prematurely, when the density of the serum is reduced, there is, I repeat, no possible escape from the results pointed out. These may, therefore, be accepted as absolutely fixed facts in disease, about which no disputes can arise to unsettle our full and complete reliance upon them as settled questions in the science of pathology. Consequently, when leucocytes appear under such circumstances, we can know just why they appear, and what has led to them. And as there is the greatest doubt about leucocytes arising from, or being caused by, anything else than a diluted serum, we have this whole question as fully, clearly and simply settled as that of the origin of pus-corpuscles.

Under a very moderate diluting of the serum, we have only the oldest, and otherwise weakest red corpuscles, decolorized in the circulation a little before that result would be wrought upon them naturally by the spleen and liver, say a few days, and in that case we have the appearance of but a few leucocytes in the blood,

and no serious derangement of the general health of the patient from it. But if there is a greater and quite marked dilution of the serum, then not only the oldest and weakest red corpuscles, but many others, or all excepting the young and more vigorous of the middle aged, are decolorized by circulating in this too watery medium, and the general health of the patient suffers seriously; though there are still enough corpuscles left in a normal or nearly normal condition to carry on their functions to the extent of permitting the continuance of life, and indeed, of a restoration to health by proper curative measures. If a still greater dilution of the serum occurs, so that a fourth, a third, or more, of all the red corpuscles are decolorized, then we have leukæmia and a very dangerous condition, but still one that no doubt permits of some recoveries. And yet, again, we may and do have cases of such excessive dilution of the serum that half to three-fourths, or more, of the red corpuscles are decolorized and destroyed, when the case is beyond all remedial measures, and death certain and speedy.

Under such circumstances, the colored blood-corpuscles are effected by a too watery serum, much as we would be, or worse than we would be, by living continually in a fog, or in very damp cellars, or as salt water fish are in pure fresh water. They, the corpuscles, bloat from having to live in the too watery medium, as we would under like conditions, become dropsical, lose their color and finally die; and there is no escape from such results in the one case more than the other.

There is one possible exception, and one only, to the foregoing being the full explanation of the occurrence of leucocytes and leukæmia in *all* cases, and that is as follows: Some forms of disease of the mesenteric glands may interfere with the manufacture of a portion, or large numbers, of the chyle-corpuscles, in the proper manner to receive their coloring; or disease of the receptaculum and thoracic duct may, through chemical agencies, prevent many of such corpuscles from being colored as they ought; under either of which circumstances those corpuscles would go on into the general circulation as leucocytes from the start, and if their numbers were large, we would have leukæmia from this cause.

But all this is surmise, while the great fact remains entirely beyond question, that leucocytes *are* produced in all cases when the blood becomes too watery, and leukæmia, when it gets to be very watery. And this is all there is of this part of our subject, about which there has been so much mystery and controversy for half a century or more.

(*To be continued.*)

SEWER GASES.—VENTILATION OF SOIL AND WASTE PIPES AND UNDER-DRAINS.

BY H. M. PAINE, M. D., OF ALBANY, N. Y.

(*Conclusion.*)

Ventilation upward through the open soil-pipe insufficient.—In order to provide for the escape upward of these gaseous accumulations, it has been customary in many places to extend the principle waste or soil-pipe to the roof of the building. It is obvious, however, on reflection, that unless a current through the pipe can be established, providing for the constant admission of fresh air, the formation of poisonous gases will be neither prevented nor their removal promoted.

"If, however, the pipe system is open to the air through the roof, as it is now frequently made, then the excess of generated gas, after the pipes are fully charged, will pass out from the opening above; but the pipes themselves will be still fully charged with sewer gas, which is constantly being supplied from the fermentation going on everywhere in the system, and it will escape through any openings into the house, and will diffuse through the water of the traps, even though all of the pipes are in communication with the soil-pipe opening at the roof. What escapes from the opening at the roof is obviously only the excess which is generated momentarily, just as steam blows out at the safety-valve while the boiler is fully charged. How much this amounts to in any house, may be estimated by going on the roof and observing the action at the aperture of the soil-pipe in a case where there is a street trap cutting off the sewer, and

where, therefore, all that escapes at the roof is momentarily generated in the house itself. The odor which is diffused through the atmosphere for a considerable distance from the pipe aperture is sickening; and one whiff of it in its concentrated form, as it escapes from the pipe, will nauseate a strong stomach, and generally produce stricture at the forehead and headache, thus showing its effect upon the human system."

The only effectual remedy—Ventilation, both upward and downward.—"The true remedy for all these evils, and it is entirely effectual, is to reduce by exhaustion the PRESSURE IN THE SOIL-PIPE, BELOW THAT OF THE ATMOSPHERE, at the same time supplying the soil-pipe at its bottom with fresh air, constantly flowing through it, whereby all the gas generated in it is diluted and swept away as fast as it is made, and the interior of the pipes is dried by the fresh air flowing in below, and as a consequence fermentation is arrested for want of moisture, one of its essential conditions."

Although the process of decomposition is greatly accelerated by the heat of the house, and while the formation of noxious gases cannot be entirely arrested, yet their accumulation and concentration can be effectually prevented, and their deleterious properties neutralized and rendered comparatively harmless, by the admission and free circulation of outside air upward and downward through the pipes. This desideratum can only be accomplished after carrying upward the soil or waste-pipe of uniform size throughout, from the drain underground to a point a few inches above the roof of the building, by the insertion of a short ventilating tube into the drain outside of the house, and between it and the trap, and extending the pipe a few inches above the surface of the ground. To prevent liability to frequent closure of this tube, it is usually bent over at the top. See diagram "C."

The lower ventilating tube essential.—The introduction of this lower tube is essential to the completion of the system of ventilation of soil and waste-pipes. Without it, and with soil or waste-pipes closed at the top, the confined and rarified gases ALWAYS escape into the house. Without it, and with an open soil or waste-pipe

extending to the roof, only the overflow of gases escape into the air above the roof. These are constantly accumulating, consequently the waste and soil-pipes are always filled with them, and, being usually lighter than ordinary air, they readily pass upward in a concentrated form. Without it, therefore, there is constant, actual danger. But with it, as prevention is better than cure, so the introduction of this short ventilating tube at the lower end of the soil or waste-pipe not only facilitates the exit of noxious effluvia as rapidly as they are formed, but PREVENTS THEIR FORMATION by the free admission of cool, dry air. It is well known that heat and moisture promote, while coolness and dryness retard fermentation.

The lower tube, also, allows the free escape out of doors of any gases denser than common air; it is also a ready method of ascertaining, by means of a lighted taper, whether any stoppage in the drain or soil-pipe has occurred inside the building. The heat of the house in winter causes a rapid upward flow, and in summer, on account of the relative coolness of the inside of the house, the currents generally flow downward.

Practical results of soil and waste-pipe ventilation.—An examination of waste-pipes, after a few weeks' trial of this improved system of ventilation, shows previous accumulations to have been greatly reduced in quantity and changed into inert and harmless material. The good offices of these two self-ventilating soil and drain pipes, illustrated by the accompanying diagram, are therefore plainly apparent. They allow a free circulation upward and downward, thereby relieving the pressure of heated and rarified gases; also the overflow of denser ones; also preventing the drawing of the water out of the traps by suction,—thus securing perfect immunity, if the connections between the joints of the pipes are tight, as they should be, from all atmospheric contaminations within the building. It is safe to assume that no dwelling without them, however costly and well-appointed in other respects, is a suitable place of residence.

Other precautionary measures.—"Then see to it that all drain-pipes leading into this soil-pipe from the wash-basins and baths have only one trap in them, and that one AS NEAR AS POSSIBLE TO THE BOTTOM OF THE WASH-BASIN OR BATH; and that there are no traps under water-closets in which to store excrements; and no overflow-pipes, such as described above, to the bath-tubs; and the house will be effectually protected against sewer gas."

Danger from the escape of contents of drains into the soil underneath dwellings.—While it is of the highest importance that soil-pipes and drain-pipes within the building should be freely ventilated, it is also necessary that they should be at least so tightly jointed as to prevent the exit of their fluid contents into the soil underneath the building, or at any point contiguous thereto. The escape of the fluids from imperfectly constructed drains into the soil underneath dwelling houses soon completely saturates large portions of the surface earth, which, with or without the aid of the heat of furnaces or stoves in close proximity, generates an abundant supply of foul gases. These rise through the crevices of the floors into the house, and very frequently become a frightful source of disease and death.

Danger from drainage into cesspools.—Without doubt a thorough system of under-drainage in cities is far preferable to drainage into cesspools, such as is frequently resorted to in the country and in small towns. Drainage into cesspools, like the infiltration of sewage underneath dwellings, frequently becomes a prolific source of disease. The soil, for a distance of many feet, becomes fully saturated, and then overflowing into the cellar of the house, or finding natural channels underground, passes readily into the well which supplies drinking water for the household. Then, too, soils of an impervious structure, by preventing the absorption of the fluids, causes them to come to the surface, where the heat of the sun quickly engenders putrefaction and the formation of noxious gases. It is probable that "filth diseases," when they occur in the rural districts, in a large majority of cases are a result of local causes, having their origin in defective surface or cesspool drainage.

It is stated in the forthcoming first annual report of the State Board of Health that, diphtheria having recently prevailed in the village of Geneva, an investigation developed the fact that in the locality where the disease seemed especially malignant, the proprietor of the premises succeeded in his fourth attempt at sinking a well for the use of his family, the location of which he was compelled to change three times on account of having opened old and unused privy-vaults. It is clearly presumable that both the water and the atmosphere in the immediate vicinity of soil so thoroughly infiltrated with decomposing excreta would occasionally become a favorite nidus of almost any disease having a germinal origin in such a source.

Cesspools into which house or sink drainage enters, should be always provided with two ventilating tubes of unequal lengths above ground, in order the better to promote a circulation of air through them, and communicating beneath in such a manner as to receive and convey away all accumulations of foul gases.

Minute vegetable organisms.—"I have examined the interior surfaces of these discharge pipes, and find them coated with extremely minute vegetable organisms, not observable by the naked eye, but very distinct and well defined under a microscopic power of about two thousand diameters."

Doubt regarding the noxious properties of sewer gases.—There are many persons in every community who do not believe that sewage vapors are, to any considerable extent, prejudicial to health. They claim that far too great importance is attached to this subject, and that the series of proposed protective measures are expensive and unnecessary. They predicate their opinion on the well-known facts that many persons enjoy almost entire exemption from malarial diseases, while living, often to old age, in districts where these influences are abundant and constant the year round.

It is not, however, my purpose in preparing this paper to enter upon a critical or exhaustive examination and discussion of this important subject, or to attempt a reply to the argument advanced. While admitting that, in some cases, many facts appear to contro-

vert the theory of septic contamination of sewage gases, we must also concede that in other circumstances and conditions the evidence in support of the disease-producing power of these gases is abundantly conclusive.

It is not claimed that sewer gases are in themselves in all cases specially harmful. The danger consists in these gases being a nidus for the rapid propagation of the various germs which, on being introduced into the system, so often produce the serious and frequently fatal diseases previously described. The evidence of the presence of these deleterious gases is irresistible and conclusive, and I have endeavored in the foregoing statements to plainly point out the danger therefrom and suggest such preventive measures as appear to be thoroughly effective, and at the same time easy of application.

How to detect defective joints in the soil-pipe or drain.—An effective method of ascertaining whether gases are escaping from any portion of the pipes or drains into the building is, the pouring into the soil-pipe, at its highest inlet, an ounce or more of the oil of peppermint. If there are any defective joints either above or below the surface, the odor of the oil will speedily reveal them.

Legislation required.—This subject is intimately connected with the public welfare from a hygienic and sanitary point of view. The danger to public health from defective drainage and ventilation is, now so well understood, and can be so easily avoided, that the regulation of this important matter will not be much longer controlled by the ignorance, neglect or cupidity of property owners. It will, without doubt, ere long be placed under the immediate supervision of competent authority, probably the local health boards. With a view of promoting this desirable end, the following resolution was adopted in July, 1879, by the Homœopathic Medical Society of Albany County and the Homœopathic Medical Society of Northern New York:

WHEREAS, Instances of serious and frequently fatal diseases are directly traceable to imperfect construction or defective arrangement of soil and waste-pipes in dwelling houses, factories, and all habitable buildings; and

WHEREAS, Such defects are frequently the result of erroneous views of well established principles of ventilation on the part of owners of buildings or those to whom the work is entrusted: therefore,

Resolved, That in the opinion of this Society it is exceedingly important that the construction of plumbing work in all cities and villages should be done under the supervision of competent authority.

EXPLANATION OF THE DIAGRAM.

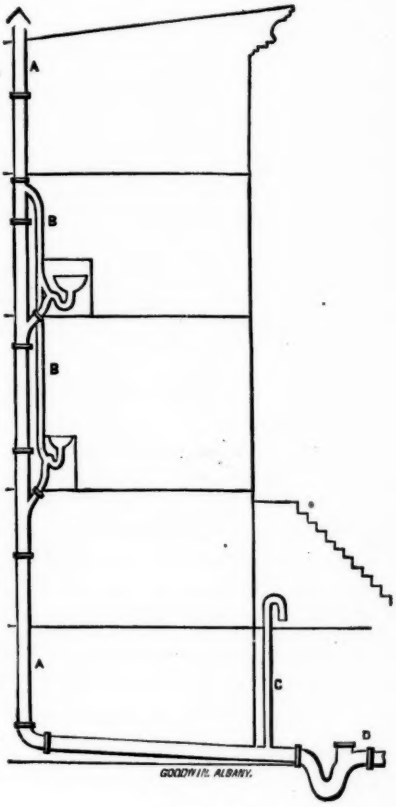
The annexed diagram shows the proper arrangement of soil pipes, air tubes, ventilating tubes and traps in dwelling houses.

A. A., Self-ventilating soil-pipe, passing, of uniform size, cut above the roof, providing for free ventilation upward.

B. B., Air tubes connecting with the soil-pipe above the water-closet, to prevent drawing out of the water in the traps by suction.

C., Short ventilating tube outside of the house, opening a few inches above ground, to secure thorough ventilation of the soil-pipe and drain downward.

D., Trap in the main drain outside of the house, and beyond the short ventilating pipe, to prevent ingress of sewer gas from the street drain.



TREATMENT OF HEPATIC COLIC.

C. SMITH, M. D., ALBA, PA.

The INVESTIGATOR, for March, is duly received, and in it I find a treatment for biliary calculi, which is similar to one that I have employed with the best of results, and which I think, may prove of some value to the profession. It is as follows :

℞ Tinc. Gelsemium (Green root),
Olive Oil, aa. ℥ ij.

M. Sig. One teaspoonful to be given every half hour until the patient complains of drooping of the eyelids. I then suspend the medicine, and before reaching this point all pain will have ceased.

The patient should be placed in the same position as that described in the article above referred to. This treatment has never yet failed in my hands. Do not be afraid to give it a trial ; your patients will thank yon for the relief they obtain.

REPLY TO DR. CHAPMAN.

T. F. POMEROY, M. D., JERSEY CITY, N.J.

Dr. G. L. Chapman, in his reply in the April number of the INVESTIGATOR, says : " If they can make these shots, and repeat them to the satisfaction of others, and explain the law that enables them to do so in so clear a manner that others can follow them, *then* I will concede the science." This, in regard to my reference to those therapeutic " rifle shots," that are competent to any well read and experienced prescriber of homœopathic medicine, citing two or three well known representatives of this style of prescribing as examples, and only as examples, although the doctor has attempted to throw upon *me* the onus of holding them as only " occasional" and of exceptional occurrence. To any one well-read in homœopathic literature, if only journalistic literature, this attempt is a transparent failure ; as such I leave it to its fate, and the doctor—to learn the facts.

The above quoted sentence carries with it the admission that Dr. Chapman is not an expert, nor even a novice in the matter of truly

homœopathic "rifle shots," if, indeed, he is a proficient in therapeutic "rifle shots" of any kind whatever. So, also, does it evince an entire ignorance of what Dr. Constantine Hering, so aptly terms "the strict *inductive* method of Hahnemann." Such being manifestly the fact, I might, if I was disposed to be censorious, recommend that he shall "tarry in Jericho till his beard be grown," but as I am disposed to be as tolerant and as courteous as himself, I may only recommend him to peruse and to *study* the standard works of homœopathy, that treat of its principles and philosophy, such as the "Organon of Hahnemann," Joselin's "Principles, &c., of Homœopathy," Dunham's "Homœopathy, The Science of Therapeutics," and kindred works, and then, or concurrently with them, let him make a faithful and diligent *study* of the homœopathic materia medica. After he has mastered these to a reasonable degree, which evidently he has not yet done, let him begin the "rifle shot" practice for himself. He can then write of it understandingly, and if he chooses, argue against it intelligently.

This is a work that he must do for himself. No one can, by any process known to sicence or art, otherwise than by this method, *make* him "concede the science," nor even to recognize, much less "concede," "these *occasional* rifle shots of Dunham, Lippe and Hering," *et al.*

In this work of art, he must himself be at once the marble in the rough, and the sculptor who shall bring its fair proportions to the light, and unveil those beauties that lie now all concealed beneath its ungainly surface. To this work I now commend him, and in its prosecution I wish him the utmost success.

In conclusion, let me add that Dr. Chapman, if not intentionally, certainly very carelessly persists in misquoting me. He says: "The doctor says, 'the rifle shots of Dunham, Lippe and Hering are at once prophetic, and the fulfilment of prophecy.'" Then he goes on to add that the rifle shots of "those men do not constitute a science." First, misquoting me, for there is no such statement or sentence in the article he professes to review, and then, replying as if I had made such an assertion. What I did write is as follows, viz.: "I would commend him to an observation of the clinical methods of

any unmitigated and uncompromising 'homœpathician' *like* Dunham, who was noted for his 'rifle shots,' Lippe and Hering, and nearer home perhaps, Gregg." Had Dr. Chapman being perfectly fair, he would have indicated that I mentioned these gentlemen only as representatives of a class, a class to which he himself, or any other physician, one of mediocre ability even, could readily belong by the use of the same means that has served to give them the ability to so accurately prescribe, and to which I have already recommended him.

HOMŒOPATHIC MEDICAL SOCIETY OF NORTHERN NEW YORK.

The Thirty-first Semi-annual Meeting of the Society was held in Troy, April 19, 1881. There were twenty-two members present. The President, Dr. Peckham, of Waterford, delivered an address, in which he reviewed the history of the Society, called attention to the usefulness of the Society, and urged a largely-increased attendance and the contribution of a greater number of practical and well-prepared papers. Eight physicians were added to the list of members.

Dr. Mesick exhibited one of Dr. Butler's electro-massage instruments, and in extended remarks explained its uses in the various diseases and conditions for which it is specially applicable. The combination of electricity with massage, its readiness of application, its certainty and uniformity of action, cleanliness, moderate size and yet abundant power, as developed and rendered easily serviceable, are points of superiority possessed alone by this new and convenient instrument.

Dr. Paine thought the union of modified massage and magnetism, as developed and applied by Dr. Butler's instrument, one that would prove a very important adjunct in the treatment of many diseases of frequent occurrence in practice.

Dr. Lamb had found electricity very useful in the treatment of many cases of paralysis, ovarian irritation, and prolapsus uteri.

Dr. Belding had applied electricity in the treatment of some diseases of the ear and eye, with very satisfactory results, particularly

several cases of deafness. He suggested that an electrode on the principle of the roller, that could be adjusted to an ordinary battery, would be an improvement worthy the attention of manufacturers of electrical instruments.

Dr. Paine read a paper on the utility of the hot water douche for the relief of congestion and inflammation of the pelvic organs. He stated that the value of the curative and resolvent properties of hot water had not been fully estimated, chiefly, we may fairly conclude, because its proper mode of application has not been resorted to on account of the difficulties hedging about its thorough administration.

"The abnormal condition being an undue distention of the capillary vessels within, and surrounding the pelvic organs, it is obvious that a standing or sitting posture effectually prevents a complete and easy flow of blood therein. While maintaining a sitting or upright posture, the return of venous blood from the pelvis and lower extremities is retarded by the force of gravity, also by the weight of a portion of the intestines within the cavity of the abdomen. It will be perceived, therefore, without further explanation, that in order to obtain the full benefit derivable from the use of hot water injections, the advantage of applying the fluid while the patient maintains a recumbent posture, constitutes the chief element of its successful application. The advantages of this position can and ought always to be still further promoted by a considerable elevation of the hips."

The doctor exhibited a tin receiver so constructed as to catch and convey away the water without the risk of an overflow into the bed. The shape of the pan conforms to that of the body of the patient. The part placed in contact with the body is covered with a cushion of soft rubber to prevent its being over-heated by the hot water. The appliance is designed to be used by the patient without the aid of an assistant.

Dr. Niver presented a patient for examination, an elderly man, suffering from chronic cystitis. The case proved one of interest, and drew out an extended discussion regarding its peculiar features.

At the afternoon session, Dr. Coburn related the symptoms of a case of a middle-aged woman which, on account of loss of memory

and errors of language, indicated evident embolic obstruction of some portion of the cerebrum.

Dr. Paine read a paper on the utility of ozone as a disinfectant and deodorizer, and exhibited an American Ozone Generator, a new instrument manufactured by the Hectograph Company, of New York. He said: "It would appear that ozone is the principal, if not only true disinfectant, known to our globe; and that it not only renders foul air pure by neutralizing and rendering harmless all noxious gases, but also speedily destroying the *germs* of disease which therein find their favorite nidus, and without which they cannot exist. It is plainly evident, therefore, that all private residences, business houses, offices, schoolrooms, and all public buildings, should be provided with the means for generating a supply of ozone, if for nothing else than that of a preventive of the origin and development of disease.

The doctor read extracts from letters showing the value of ozone in a case of catarrhal bronchitis, treated by Dr. Linsley, of New York, and one of asthma, by Dr. Demarest, of New York, both of whom agree in recommending the instrument as worthy of trial in similar cases; and concluded as follows:

"As regards my own brief experience, I am decidedly of the opinion that the Ozone Generator is an exceedingly useful instrument. I have tried it in two cases of scarlet fever, in both of which no new cases occurred, although other children were living in the houses where the disease made its appearance. I have also tried it in one severe case of infantile remittent fever, one of chronic bronchial inflammation, and one of influenza. The last named did not appear to be influenced in any way by it. The others were evidently benefitted.

"I fully concur with Dr. Demarest in stating that the production of ozone, by means of this new process, while of unquestioned merit and eminently worthy of continued and repeated trials, is still too recent to warrant definite conclusions regarding its practical advantages. Many other appliances and methods for the production of ozone are far too expensive to admit of their general use; this one, however, on account of its simplicity and cheapness, commends itself to the favorable consideration of the profession."

Dr. Waldo read a very suggestive and finished paper on human milk. The subject was examined and treated in a thorough and exhaustive manner, and the discussion on it was of exceeding interest and replete with practical suggestions regarding the management of bottle-fed infants.

Dr. Holden read a sketch of the life, character and services of the late Dr. B. F. Cornell, one of the pioneers of homœopathy in Northern New York, and one of the founders of this Society. Dr. Cornell died at Warsaw, Saratoga county, April 12, 1881, aged 77 years.

The Society adjourned to meet at Saratoga Springs, on the second Tuesday in August.

H. M. PAINE, M. D.
Secretary.

Selections and Abstracts.

DIASCORIA VILLOSA—WILD YAM, OR COLIC ROOT.

BY J. J. M. GOSS, A. M., M. D., MARIETTA, GA.

This singular little trailer was named for the celebrated Diascorides. It is a delicate, trailing vine, running upon bushes, fences, and along the ground. It is plentiful in the Southern states, but rather scarce in the Northern states. It flowers in July and August, and seeds in the fall. The seeds are in a small three-square capsule. The root is the part used, which has a sweetish-bitter taste, and contains a milk-like juice, and a bitter, acrid principle, called *diascoria*, upon which its medical virtues depend. This plant has not received its merited attention by the profession.

Phisiological Effects.—In large doses, this plant produces the following toxical effects, viz.: Pains of a neuralgic character in the bowels and over most of the body, which, though they are continuous, yet are somewhat remittent in severity. These pains are most commonly felt in the abdomen, and are manifested as a "twisting" in the small intestines, but the same sensation extends to the umbilicus. With these pains, or colic, there frequently are watery or jelly-like, yellowish or bilious stools, burning, tenesmus, and sometimes prolapse of the rectum, offensive flatus, and often nausea and

vomiting. It causes, also, amorous dreams, emissions, with erections, etc. It evidently has a direct affinity for the spinal cord, and produces its effects through its profound influence upon that part of the nervous system. It acts especially upon the umbilical and cœliac plexuses of nerves, and upon the muscular tissues, over which these nerves are ramified; also, upon the liver, and upon other portions of the sentient nervous system.

The *indications for its use* are: Muscular pains, which, though constant, are aggravated at regular intervals. It is a special remedy for colic, starting at the umbilicus and radiating over the abdomen. It relieves neuralgic or myalgic pains of other parts of the body, which are aggravated by paroxysms. It may be prescribed with confidence in facial neuralgia, cardialgia, spasmodic and flatulent colic; painful tenesmus of the rectum, bladder, or uterus, spasms of the gall-duct, sciatic neuralgia, and other like spasmodic pains. It is a remedy for pains of a spasmodic character in the stomach—resembling here the action of the oxide or subnitrate of bismuth. When attacks of cholera morbus are attended with twisting pains in the abdomen, diascoria will be found to give quick relief to this element of the disease.

It has also decided influence over the male organs of generation. Where there are frequent and strong erections, amorous dreams with emissions, this remedy may be given with confidence of success. It is also a valuable remedy in spermatorrhœa.

In females, it is a valuable remedy for dysmenorrhœa, uterine colic, after-pains, and the cramp-like pains of pregnancy. It is also a good remedy for intercostal neuralgia and angina pectoris. It relieves the pain of neuralgic rheumatism.

The following excerpt, from the author's work, on *Materia Medica* will illustrate the action of this remedy fully: Under the head of diascorin, I state that diascorin is the anti-spasmodic and cholagogue principle of the diascoria villosa, or wild yam. It seems to exert an æsthenetic and anti-spasmodic effect upon the stomach and bowels, and, at the same time, it corrects many morbid conditions of the biliary secretion. In hyperæsthesia of the stomach and bowels, the diascorin is a very positive remedy. In bilious colic, combined

with enonymin and podophyllin, diascoria gives immediate relief. In bilious colic, one or two grains will give relief. In neuralgia, it may be combined with quinine and gelsemium, in due doses. In dysentery, combined with gelsemium, it will relieve the tenesmus and tormina. In dysmenorrhœa, combined with scutellaria and viburnin, it gives prompt relief. This remedy, in medicinal doses, produces its anti-spasmodic and soothing effects upon the system, without any disturbance to the general system. The usual *dose* of the diascorin is from one to two grains. The dose of the tincture is from one to two drachms, which may be repeated in one or two hours, until relief is obtained.—*Virginia Med. Monthly.*

BOILS.

M. Planat, having used arnica in superficial inflammations, like erysipelas, boils, etc., was led to believe that arnaca will abort the latter with great promptness. The arnaca should be prepared in the following manner:

Extract of fresh arnica flowers, ten grams; honey, twenty grams; powder of lycopodium, sufficient to make a paste of proper consistency to spread.

This should be spread on adhesive plaster and applied to the boil. The plaster should be renewed every twenty-four hours, twenty-five to thirty drops of the tincture of arnica given every two hours facilitates the cure.—*American Spectator.*

THE DIPLOMA TRAFFIC FALSE.

John Buchanan, in the last throes of fate, endeavored to rival Sampson in the way of killing more in his death than during all the days of his life. The Philadelphia *Record*, of March 26th, has an abstract of his "Confession," which "beats Banagher." He reports 60,000 diplomas sold by him. At $50 each, this would be $3,000,000. But the charlatan is poor. Grant he bought legislative committees in a high-priced State capital; that he maintained judges and lawers to clear him when accused; that he had a very extravagant wife, which has been asserted; that he paid each "professor," including two or three "sweet scented geraniums" from New York, $5 each for every signature—altogether he does not account for it. There

were others in the business; enough to furnish a bogus diploma to every doctor in America and Europe. The number of spurious doctors is immense, "prodigious"—but John Buchanan did not have transactions with them all. Sixty thousand is, as the late Artemas Ward expresses it, "too much."—*Medical Tribune.*

SULPHIDE OF CALCIUM (HEPAR SULPHURIS CALCUREA).

This is an old remedy in the homœopathic school. It has lately been brought forward as a new one by the opposite wing of the profession, and is recommended highly for certain diseases.

"Calcium Sulphide is very valuable in skin lessions, attended with suppuration. In *acne* of a pustular form, in *hordeolum*, (styes,) and *boils* it is useful. It not only relieves the symptoms, but prevents further crops of boils."

"At a meeting of the St. Louis Medico-Chirurgical Society, Dr. Todd, in discussing the above subject, stated that he had adminis, tered this medicine in the case of a child about eleven years old, who was suffering intense pain from suppuration of one of the ears. There was also a great deal of swelling about the ear and some of the neighboring glands. Under doses of one-twentieth of a grain, given every two hours, the pain was relieved in a most marked manner. Dr. Spencer, in referring to the use of this drug, stated that in his experience, after giving it a fair trial in some forty-five cases of furuncular inflammation, together with suppurative processes in the middle ear, he could not see that it had in any instance either shortened a case or influenced it in any way. Dr. Glasgow reported that he had treated several suppurative cases successfully. One of them, a case of tonsilitis, where the pain was intense, was greatly benefited by the use of one-quarter of a grain every two hours. Others, however, who reported their experience to the Society, had failed to obtain results similar to those of Dr. Glasgow."—(*Am. Journal of Otology,*) *Med. Record.*

"Dr. F. N. Otis remarks: I have taught, up to within six months, for many years, that when a gland is enlarged as a result of the

chancroid secretion, suppuration is inevitable; a chancroid is at that moment established in the centre of the gland, which goes on inevitably to suppuration and the formation of an abscess, the secretion of which is chancroidal. But the experiments which were made last winter in the Blackwell's Island Hospital, under my supervision, by the administration of calcium sulphide in all cases of bubo associated with chancroid has led to the belief in the possibility of that suppurative action being arrested, because fifteen out of eighteen buboes so associated with presenting chancre were brought to resolution. The fact that the administration of one-twelfth of a grain of the calcium sulphide every two hours, combined with other such treatment as rest, iodine and pressure, resulted in the resolution of fifteen out of eighteen such cases, is sufficient to warrant its trial.—(*Medical and Surgical Reporter*), *Peoria Med. Monthly.*

Editorial Department.

INCREASING LIBERALITY IN THE MEDICAL PROFESSION.

On another page of the INVESTIGATOR, will be found an article entitled "Diascoria," from the *Virginia Medical Monthly*, a staunch, able and valuable "old school" journal. This article, it will be noticed, describes "wild yam" and its physiological action, and then gives the indications for its use; and these are prominently *homœopathic*, or upon the principal of "*similars.*" Furthermore, this article is furnished by one of the best known eclectics in the United States, Prof. Goss. This, indeed, is a marked instance of "blending." Here we have homœopathy (not, perhaps, representing the minimum dose,) "propounded" by an eclectic, and served to the profession by an "orthodox" medical journal. This is as it should be, and it is not the only instance. Many allopathic journals are using articles written by so-called "irregulars," and quoting those contained in what are sometimes denominated "quack literature." Medical works, by

"regular" authors, are also incorporating methods of treatment and remedies before unknown, except in the minds and literature of those they would "blush to name" for fear of "professional" and "ethical" censure. It is contrary to the creed of those who subscribe to the "regular" code of ethics to have anything whatever to do, *professionally*, with a physician who holds to an "*exclusive*" theory or practice, and yet this is done on every hand, the "straight-jacket" notwithstanding. Consultations are held with "quack" physicians, their writings are willingly used, and their remedies and principles of treatment are appropriated; often, yes, generally, without credit,—stolen. One journal, too, the *Pacific Medical and Surgical Journal*, gets "rapped on the knuckles" for even *speaking* of an eclectic in terms of respect. It "raps" back in these significant words of liberal independence: "A writer in the *Michigan Medical News* raps us over the knuckles for having named a certain prominent eclectic in Cincinnati in terms of respect. Not knowing anything against the individual, and judging him only by his journal, we had no reason to speak of him otherwise. As we may desire, at a future time, to make use of the names of some non-orthodox doctors in the East, we would ask our critical friend to furnish us a list of a dozen or so, of whom we may speak respectfully without giving offence to any sanctified brother." Thus bigotry and intolerance, in the medical ranks, is manfully rebuked by an honest and true-hearted member of its own file.

One of the most prominent and far-reaching violations of the sanctity of the "regular" household of medicine, occurred in the case of the late Lord Beaconsfield, on whom Dr. Kidd, a reputed homœopath, attended. At the crisis when counsel was desired, Sir Wm. Jenner was called, but refused to go because it was *unprofessional* to meet a homœopath, saying that it was impossible for a practitioner of *scientific medicine* to meet a person professing the principles of homœopathy. Sir Wm. Gull sustained the refusal. After this, Dr. Quain was called, Lord Beaconsfield expressly desiring to see him, Lord Barrington bearing the message. Dr. Quain showed some hesitation; but after referring to the Medical Directory, and finding Dr. Kidd a qualified medical practitioner, and being assured

by the latter that he was not treating the case homœopathically, he sought the advice of Sir George Burrows, ex-president of the College of Physicians, who expressed the opinion that if Dr. Kidd was not treating the distinguished patient otherwise than on rational principles, he would not be justified in not attending; also that of Sir R. Bennett, president of the same association, who said he ought to attend. He finally went, and in gentlemanly consultation, made his great skill useful to the dying lord. Thus, in the language of the venerable *London Lancet*, "Dr. Quain violated a fundamental principle of professional conduct in acting with Dr. Kidd, an eminent homœopath, in treating the Earl of Beaconsfield according to the regular practice of allopathy." Dr. Quain is censured for not refusing to give his aid in saving a valuable life, and his heretical act is deplored in terms of great emphasis. The *Lancet*, and a dominant wing of a profession that should be above the influence of sectional bickerings and personal and often imaginary differences when life is at stake, would rather a patient would die, even though they could save him, than consult with such a man as Dr. Kidd. Shame on such bigotry and intolerance. A few more such bombs as Dr. Quain has thrown and the code of ethics will need a revision.

Thus, one by one, and with increased frequency, is "old medical orthodoxy" taking up new ideas. One by one are the old idols being broken, and day by day is the light of new facts liberalizing, broadening, deepening, humanizing and harmonizing the medical profession, till the time is not far distant when the physician will not be bound by any code or creed but that of enlightened conscience, and will seek that which is good for the relief of suffering and saving of life from *all sources*. A. A. H.

DETROIT MEDICAL COLLEGE.

This institution has got into trouble. The majority of the faculty opposed the appointment of Dr. Eugene Smith, as a member of the adjunct faculty; but the president of the faculty, Dr. McGraw, in opposition to this sentiment, and contrary to a custom of the College, by which no recommendation should be made to the board of trus-

tees without the *unanimous* approval of the faculty, recommends his appointment, and the trustees act accordingly. On receiving the official notice *eight* members of the faculty resign. *Quite a loss.*

A. A. H.

DR. GREGG'S ARTICLES.

We take pleasure in calling the attention of our readers, and of physicians generally to the series of articles upon pus corpuscles, leucocytes, and leukæmia, from the pen of Dr. Gregg, being published in these pages.

If the doctor is right, as seems very probable, about the decolorization of red blood corpuscles, under various circumstances, and if it can be established that pus-corpuscles, leucocytes, and even that tuberculous corpuscles, as he has claimed for years, are nothing more than decolorized blood corpuscles, no greater or more important discovery has ever been made in pathology. A. A. H.

THE GENESEE VALLEY DISTRICT ECLECTIC MEDICAL SOCIETY.

By invitation, Prof. Wetmore and ourself had the pleasure, a few days ago, of visiting this society at its meeting in Avon, N. Y. Contrary to the condition of most local medical societies, we found this vigorous, active, and with a membership large and faithful. The papers read at the meeting were able, and the discussions showed a large breadth of knowledge and activity of research among its members. One feature that we particularly observed was the toleration shown by one toward another. One was homœopathic in his proclivities, while another was allopathic. One was an old-fashioned eclectic, while another believed in the newly-advanced theory of specific medication. But while each one held ideas of his own, practiced upon any theory he deemed right, yet he allowed others the same privilege, and each "agreed to disagree." This, together with the humble spirit of careful, honest and extended research, is the "true genius of medicine," and the only true foundation for a *Medical Science.* The

acquaintances we made there were very pleasant, and the kindnesses shown us will long be remembered. May the society "live long and prosper," and its spirit permeate the whole profession, far and near, till no physician will be ostracised because of different views and practices. Only *ignorance and dishonesty* are elements of quackery; and no garb of so-called "regularism" can change them to aught else.

A. A. H.

Book Notices.

Transactions of the American Public Health Association, (Ninth Annual Meeting,) held in New Orleans, La., December 7th, 8th, 9th and 10th, 1880.

These transactions attest to an important meeting of the American Public Health Association. The papers presented on the occasion, were many and varied, and treat of subjects of much interest in the departments of public hygiene and preventive medicine. A.A.H.

A Treatise on the Continued Fevers.—By James C. Wilson, M. D., Physician to the Philadelphia and Jefferson Medical College Hospitals; Lecturer on Physical Diagnosis at the Jefferson Medical College. New York, Wm. Wood & Co., 1881. For sale by subscription by J. H. Matteson, Buffalo, N. Y.

Wm. Wood & Co. issue this work as the fourth volume of the *Library of Standard Medical Authors* for 1881. Although a new author has thus appeared before the profession, the work is none the less valuable, and its 375 pages present evidences of pains-taking study and elaboration of the subjects therein contained. Dr. Wilson has availed himself of the rich resources of "fever" literature, and carefully and systematically presented that which is practical and important. An introduction is given by Prof. J. M. DaCosta, M. D., which is very practical, and deals with the general management of fevers. Then follows the description, causes, treatment, &c., of the various continued fevers, viz.: simple continued fever; influenza; cerebro-spinal fever; enteric or typhoid fever; typhus fever; relapsing fever; and lastly, dengue, or break-bone fever. The work is a most excellent one, and worthy of recommendation to the profession.

A. A. H.

Strangulated Veins of the Uterus, and other papers, Gynaecological and Surgical. By Thos. H. Buckler, M. D., Baltimore, Md.

These papers are reprinted from the *Boston Medical and Surgical Journal*, and possess much originality. That on strangulated veins of the uterus, contains many valuable ideas, and is worthy of careful perusal by every gynaecologist. The one also on post-parturient pathology, is no less suggestive. That on free access to the abdominal cavity defends the idea that there is scarcely ever an idiopathic peritonitis, and there is little danger of inflammation of the peritoneum from simple opening of the abdomen. The author claims that peritonitis arises alone from the presence of foreign matter or contagion. The concluding paper on the surgical treatment of the ovarian pedicle is short, but gives the idea of the author on the subject, and suggests ligating the ovarian artery separately. Any slight oozing after severing the pedicle may be checked by other simple means. A. A. H.

News and Miscellany.

Ill Effects of Tobacco Using.—Dr. W. T. Dodge, Marlette, Mich., (*Physician and Surgeon*, April, 1881), reports a case of irregularity and debility of heart's action, indigestion and dizziness, in a man who used tobacco freely. The tobacco was stopped, and in two weeks the heart's action was regular, the patient was feeling much better and he soon gained in weight.

Colorless Iodine.—The use of iodine is oftentimes objected to on account of its staining the skin. It is not generally known that a very small quantity of carbolic acid will render this agent colorless without destroying its therapeutic properties.—*Medical Summary.*

The Communicability of Secondary Syphilis.—In a paper read at the St. Louis Medical Society, Dr. Maughs (*St. Louis Medical and Surgical Journal*, January, 1881) elaborately discussed certain points relating to the pathology of syphilis. His views are in direct opposition to those entertained by the Hunter-Ricordian school of syphilographers and held by a majority of the profession. Maughs thinks that, 1, secondary syphilis, is communicable as secondary

syphilis; 2, that the accidents of secondary syphilis may be transmitted from a diseased to a sound person by contact of the secretions, without abrasion or lessions of surface, and, as a law, such accidents are transmitted in kind; 3, that when lessions do exist at the point of contact, such lessions are not chancres.

CACTUS AND MACROTYS IN HEART TROUBLES.—Careful clinical observation and experience in a number of well defined cardiac troubles, organic and functional, with night-blooming cereus, and black cohosh, have established their value and efficacy in cases where digitalis had proven utterly valueless, or attended only with slight amelioration of the troubles.

GOITRE—CHLORIDE AMMONIUM.—Dr. Stevens, of Quebec, reports seven cases of goitre cured by the cloride of ammonium. Six were girls, under twenty years of age, and one a married woman, aged forty. The dose given was ten grains, three times a day, the tumors entirely disappearing at the end of three months.—*Amer. Pract.*

HOW TO COVER THE ODOR OF IODOFORM.—Several methods have been proposed, the following of which, according to *New Remedies*, are the best: 1. Tamin mixed with the iodoform in equal parts. 2. Oil of peppermint in the proportion of a drop to every drachm. 3. Lavender water and eau de cologne have been recommended, but are not so effectual as the peppermint. 4. Balsam of Peru, three parts ; iodoform, one part ; vaseline, three parts, or, in place of the latter, alcohol, collodion, or even glycerine. 5. Oil of sweet almonds added in equal parts to the iodoform. 6. Oil of bitter almonds. One or other of the first two methods is probably to be preferred.—*Mich. Med. News.*

ERGOTINE SUPPOSITORIES IN PROLAPSUS ANI.—R. Eichler, M.D., San Francisco, writes : A boy five years of age came under my treatment, suffering from prolapsus ani of two years' standing. The gut came out to the extent of two and a half inches after each passage. My treatment at first was of the routine kind—cold effusions, cauterizations with nitrate of silver, tincture of iron, etc. The bowel persisted in coming down at every passage. As a last resort I tried an ergotine suppository.

℞. Ergotine, gr. ij; but. cocoa, q.s. M. ft. suppos., No. j. One after each passage.

The effect of the remedy has been magical, as after the use of a few of the suppositories, there has been no return of the condition, and the case is cured.—*Western Lancet, Dec.*

Topical Use of Ergot.—The value of the local use of ergot is receiving (*Med. Press and Cir.*) endorsements from various quarters. It is particularly applicable in catarrhal diseases of the eye and throat. In chronic conjunctivitis it may be employed in the strength of gr. x. of the extract to ℥ j. of water, a little glycerine being added to preserve the drug. In chronic pharyngitis, when the secretion is not very great, it makes an excellent ingredient of a gargle, or it may be used with tincture of iodine and applied with a probang. In cases of nasal catarrh, it may be employed by means of gelatine bougies. In using the ergot it should generally be combined with glycerine, as that agent both preserves it from decomposition, and keeps it longer in contact with the diseased surface.—*Gaillard's Med. Jour.*

Resuscitation from Freezing.—Regarding the subject of resuscitating frozen persons or animals, experimenters and clinical surgeons widely differ. The latter advocate the gradual introduction of heat, while the former claim that it should be applied rapidly. Experiments were made on dogs, by Dr. Laptschinsky, with the following results: Three dogs of the same size, age, and species were frozen simultaneously. One of the animals was then placed in a bath at a temperature of 37° R. (about 110° Fahrenheit); the second in a room heated to 26° R. (about 82° Fahrenheit), and the third in a cold room heated to 0° R. (freezing point); and directly afterward, as soon as there were symptoms of returning animation and an increase of vital temperature, the latter was introduced into a warmer atmosphere. In each case friction with brushes and coarse cloth was resorted to, but the rapid method of resuscitation by the hot-bath proved most effectual. Of twenty animals treated by the gradual method of resuscitation in a cold room fourteen died, while the twenty introduced at once into a warmer room, eight died, while the twenty placed immediately in a hot-bath all recovered.